

Notice of Allowability

Application No.

09/783,008

Applicant(s)

GIBSON, GARY A.

Examiner

Kim-Kwok CHU

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed on 9/5/2006.
2. ☒ The allowed claim(s) is/are 1-3, 5-9, 11-17, 19 and 21-31 which are renumbered as 1-27 respectively.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

1. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee.
2. The Amendment filed on September 5, 2006 has been amended as follows:
 - (a) in Claim 23, line 11, the term "bema" has been changed to --beam--.

REASONS FOR ALLOWANCE

3. Claims 1-3, 5-9, 11-17, 19 and 21-31 are allowable over the prior art of record.

4. The following is an Examiner's Statement of Reasons for Allowance based on applicant's Amendment filed on September 5, 2006.

5. The following is an Examiner's statement of reasons for the indication of allowable subject matter:

As in claims 1, 15 and 22, the prior art of record fails to teach or fairly suggest a data storage apparatus/method having the following features where an energy-emitting tip positioned in close proximity to the storage medium; a fluid medium positioned between the energy-emitting tip and the storage medium and the fluid medium comprises a ferrofluid.

As in claim 9, the prior art of record fails to teach or fairly suggest a data storage apparatus having the following features where an energy-emitting tip positioned in close proximity to the storage medium; a fluid medium positioned between the energy-emitting tip and the storage medium and the energy emitting tip emits electrons.

As in claim 21, the prior art of record fails to teach or fairly suggest a data storage apparatus/method having the

following features where an energy-emitting tip positioned in close proximity to the storage medium; a fluid medium positioned between the energy-emitting tip and the storage medium and the fluid medium comprises a magnetic material.

As in claims 23 and 29, the prior art of record fails to teach or fairly suggest a data storage device/method having the following features where an energy-emitting tip positioned in close proximity to the storage medium; a fluid medium positioned between the energy-emitting tip and the storage medium and the fluid medium comprises a metallic material.

The features indicated above, in combination with the other elements of the claims, are not anticipated by, nor made obvious over, the prior art of record.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Akiyama et al. (6,636,460) is pertinent because Akiyama teaches a scanning probe which irradiates an electron beam.

Courjon et al. (5,539,197) is pertinent because Courjon teaches that a scanning probe having fluid between the tip and the sample.

Ray et al. (5,466,935) is pertinent because Ray teaches that a scanning probe having fluid between the tip and the sample.

Rust et al. (5,453,970) is pertinent because Rust teaches a scanning probe which irradiates an electron beam.

Greschner et al. (5,283,437) is pertinent because Greschner teaches a scanning probe which irradiates an electron beam.

8. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Kim CHU whose telephone number is (571) 272-7585 between 9:30 am to 6:00 pm, Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington, can be reached on (571) 272-4483.

The fax number for the organization where this application or proceeding is assigned is (571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished application is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9191 (toll free).

Kim-Kwok CHU

Examiner *kc* AU2627 *11/6/2006*

November 6, 2006

(571) 272-7585


ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER